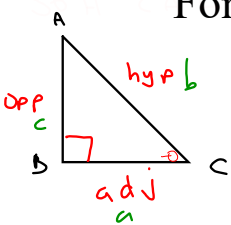


Trigonometry Formulas

SOH CAH TOA




$$\sin \theta = \frac{o}{h}$$

$$\cos \theta = \frac{a}{h}$$

$$\tan \theta = \frac{o}{a}$$

$$a^2 + b^2 = c^2$$

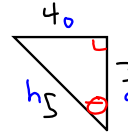
Sum of int $\Delta = 180$
Sum of Int Poly $= 180(N-2)$



Apr 6-1:43 PM

State the 3 primary trig ratios for θ

SOH CAH TOA



$$\sin \theta = \frac{4}{5} \quad \cos \theta = \frac{3}{5} \quad \tan \theta = \frac{4}{3}$$

$$\sin \theta = 0.8000$$

$$\theta = \sin^{-1}(0.8000) \text{ - trig ratios (four dec places)}$$

$$\theta = 53.1^\circ$$

$$\theta = 53 \text{ (round to the nearest degree)}$$

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Evaluate to four decimal places

$$\sin 55^\circ = 0.8192$$

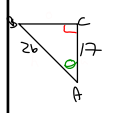
$$\tan 125^\circ = -1.4281 \text{ - obtuse triangle}$$

$\sin \{ \cos - 0 \text{ and } 1$
 $\tan = \text{only primary trig ratio that can be above 1}$

Apr 6-1:55 PM

Solve (sides to one decimal place)
(angles to nearest degree)

SOH CAH TOA



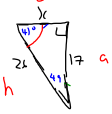
$$\cos \theta = \frac{17}{26}$$

$$\cos \theta = 0.6538$$

$$\theta = \cos^{-1}(0.6538)$$

$$\theta = 49$$

Int $\Delta = 180$
 $= 180 - (90 + 49)$
 $= 41$



$$\sin 49^\circ = \frac{o}{h}$$

$$\sin 49^\circ = \frac{17}{26}$$

$$26 \sin 49^\circ = x$$

$$26(0.7547) = x$$

$$19.6 = x$$

$$a^2 + b^2 = c^2$$

$$17^2 + b^2 = 26^2$$

$$b^2 = 26^2 - 17^2$$

$$b^2 = 676 - 289$$

$$b^2 = 387$$

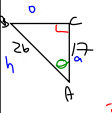
$$b = \sqrt{387}$$

$$b = 19.6$$

Apr 6-2:03 PM

Solve (sides to one decimal place)
(angles to nearest degree)

SOH CAH TOA



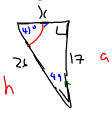
$$\cos \theta = \frac{17}{26}$$

$$\cos \theta = 0.6538$$

$$\theta = \cos^{-1}(0.6538)$$

$$\theta = 49$$

Int $\Delta = 180$
 $= 180 - (90 + 49)$
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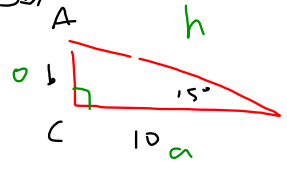
$$b^2 = 387$$

$$b = \sqrt{387}$$

$$b = 19.6$$

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3b) Solve b



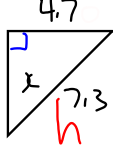
$$\tan 15^\circ = \frac{b}{10}$$

$$10 \tan 15^\circ = b$$

$$2.7 = b$$

SOH CAH TOA

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SOH CAH TOA

$$\sin x = \frac{o}{h}$$

$$\sin \angle C = \frac{4.7}{7.3}$$

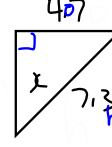
$$\sin \angle C = 0.6438$$

$$\angle C = \sin^{-1}(0.6438)$$

$$\angle C = 40.1^\circ$$

$$\angle C = 40^\circ$$

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SOH CAH TOA

$$\sin x = \frac{o}{h}$$

$$\sin \angle C = \frac{4.7}{7.3}$$

$$\sin \angle C = 0.6438$$

$$\angle C = \sin^{-1}(0.6438)$$

$$\angle C = 40.1^\circ$$

$$\angle C = 40^\circ$$

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Homework

p 260-262

q. 1-6, 7, & 9

Apr 6-2:15 PM